

In the Claims:

Please amend claims 13 and 40. The claims are as follows:

1-4. (Canceled)

5. (Previously presented) A method for managing contract data, comprising:

receiving a contract datagroup D_G by a decentralized execution system (DES) from a procurement contract management system (PCMS) over a data path within a computer network, said contract datagroup D_G selected from the group consisting of a contract dataset and a contract deltadataset, said contract datagroup D_G identifying N purchase items purchasable from a vendor V keyed to the contract datagroup D_G , said N being an integer of at least 2, said contract datagroup D_G identifying the vendor V if the contract datagroup D_G is the contract dataset, said DES comprising a relational database that includes contract datasets, vendor datasets having vendors, and purchase item datasets having purchase items;

determining which, if any, of the N purchase items identified in the contract datagroup D_G match a purchase item in the purchase item datasets and determining a total number K of such purchase items in D_G that do not so match a purchase item in the purchase item datasets, said K being an integer satisfying $0 \leq K < N$;

if the contract datagroup D_G is the contract dataset then determining that the vendor V matches a vendor in the vendor datasets and adding a subset of D_G to the relational database, said subset of D_G excluding the K purchase items from D_G ;

if the contract datagroup D_G is the contract deltadataset then adding to the first contract

dataset in the relational database R purchase items of D_G , wherein D_G is keyed to a first contract dataset in the relational database, and wherein the R purchase items of D_G consist of all purchase items of D_G exclusive of the K purchase items of D_G .

6. (Previously presented) The method of claim 5, wherein the DES further comprises a special database that includes contract datasets, wherein the contract datagroup D_G is the contract dataset, and wherein $K > 0$ and said method further comprises:

if D_G is keyed to a first contract dataset in the special database, then adding to the first contract dataset in the special database the K purchase items of D_G ; and

if D_G is not keyed to any contract dataset in the special database, then forming from D_G a contract dataset D_{C1} that includes the K purchase items and excludes the R purchase items, and adding D_{C1} to the special database.

7. (Previously presented) The method of claim 5, wherein the contract datagroup D_G is the contract dataset and the vendor V does not match a vendor in the vendor datasets, then further comprising adding a vendor dataset D_V to the relational database when a contract based on the subset of D_G is required at the DES, said vendor dataset D_V keyed to the vendor V.

8. (Original) The method of claim 7, wherein adding D_V to the relational database comprises extracting D_V from a vendor database prior to adding D_V to the relational database.

9. (Previously presented) The method of claim 7, wherein adding D_V to the relational database

comprises:

communicating a message to a DES buyer keyed to at least one purchase item of the R purchase items, each of said at least one purchase item matching a purchase item in the purchase item datasets, said message relating to adding D_V to the relational database; and

having the DES buyer cause D_V to be added to the relational database when the contract based on the subset of D_G is required at the DES.

10. (Original) The method of claim 5, wherein the contract datagroup D_G is the contract dataset.

11. (Original) The method of claim 5, wherein the contract datagroup D_G is the contract dataset.

12. (Previously presented) The method of claim 5, said PCMS being a systems applications and products (SAP) system, said DES being a SAP system, said relational database being a SAP database.

13. (Currently amended) A method for managing contract data, comprising:

receiving a contract dataset D_C by a decentralized execution system (DES) from a procurement contract management system (PCMS) over a data path within a computer network, said contract dataset D_C identifying a vendor V and N purchase items purchasable from the vendor V, said N being an integer of at least 1, said DES comprising a relational database that includes contract datasets, vendor datasets having vendors, and purchase item datasets having

purchase items, said DES further comprising a special database that includes contract datasets;

determining which, if any, of the N purchase items identified in the contract dataset D_C match a purchase item in the purchase item datasets and determining a total number K of such purchase items in D_C that do not so match a purchase item in the purchase item datasets, said K being an integer satisfying ~~$0 \leq K \leq N$~~ $0 < K \leq N$;

if $K = N$ then adding D_C to the special database;

if $K < N$ then determining that the vendor V matches a vendor in the vendor datasets and adding a first subset of D_C to the relational database and if $K > 0$ adding a second subset of D_C to the contract datasets of the special database, said first subset of D_C excluding the K purchase items from D_C , said second subset of D_C excluding R purchase items from D_C , wherein the R purchase items of D_C consist of all purchase items of D_C exclusive of the K purchase items of D_C .

14. (Previously presented) The method of claim 13, further comprising:

adding a new purchase item to the purchase item datasets;

determining whether the new purchase item is identified in a contract dataset D_{CS} of the special database; and

if the new purchase item is so identified in D_{CS} and D_{CS} identifies J purchase items such that J is an integer of at least 1, then determining whether a vendor identified in D_{CS} matches a vendor in the vendor datasets and if the vendor identified in D_{CS} so matches a vendor in the vendor datasets then:

if a contract identifier of D_{CS} matches a contract identifier of a first contract

dataset in the relational database then adding the new purchase item to the first contract

dataset, else

if the contract identifier of D_{CS} does not matches a contract identifier of any contract dataset in the relational database then adding a subset of D_{CS} to the relational database, said subset of D_{CS} including the new purchase item; and

if $J = 1$ then deleting D_{CS} from the special database else deleting the new purchase item from D_{CS} .

15. (Original) The method of claim 14, further comprising extracting the new purchase item from a purchase item database prior to adding the new purchase item to the purchase item datasets.

16. (Previously presented) The method of claim 13, said PCMS being a systems applications and products (SAP) system, said DES being a SAP system, said relational database being a SAP database, said special database being a non-SAP database.

17-21. (Canceled).

22. (Withdrawn) A method of contract archiving, comprising:

sending a list of I identifiers by a procurement contract management system (PCMS) to at least one decentralized execution system (DES) over a data path within a computer network, said I being an integer of at least 1, each identifier of the I identifiers identifying a contract dataset in the PCMS earmarked by the PCMS for archiving;

receiving by the PCMS a return list of M of the I identifiers from each DES of the at least

one DES in response to said sending, said M being an integer in a range of $0 \leq M \leq I$, said return list being DES-specific, each said contract dataset identified in the return list of each DES having been approved by said each DES for archiving; and

archiving by the PCMS each contract dataset identified in the list of I identifiers and appearing in an intersection list of the return lists, if the intersection list is not empty.

23. (Withdrawn) The method of claim 22, further comprising communicating by the PCMS to each DES of the at least one DES:

that the archiving was done by the PCMS for the contract datasets appearing in the intersect list, if the intersection list is not empty; or

that the archiving will not be done, if the intersection list is empty.

24. (Withdrawn) The method of claim 22, said PCMS and each of the at least one DES being a systems applications and products (SAP) system.

25. (Withdrawn) A method of contract archiving, comprising:

receiving by a first decentralized execution system (DES) of at least one DES from a procurement contract management system (PCMS) over a data path within a computer network, a list of I identifiers, said I being an integer of at least 1, each identifier of the I identifiers identifying a contract dataset in the PCMS earmarked by the PCMS for archiving, said list of I identifiers sent by the PCMS to each DES of the at least one DES, said PCMS adapted to receive a return list of M of the I identifiers from each DES of the at least one DES in response to said

sending, said M being an integer in a range of $0 \leq M \leq I$, said return list being DES-specific, each said contract dataset identified in the return list of each DES having been approved by said each DES for archiving, said PCMS adapted to archive each contract dataset identified in the suggest list and appearing in an intersection list of the return lists if the intersection list is not empty; and

sending by the first DES to the PCMS the return list of the first DES.

26. (Withdrawn) The method of claim 25, further comprising receiving by the first DES notification from the PCMS:

that the archiving was done by the PCMS for the contract datasets appearing in the intersect list, if the intersection list is not empty; or

that the archiving will not be done, if the intersection list is empty.

27. (Withdrawn) The method of claim 25, said PCMS and each of the at least one DES being a systems applications and products (SAP) system.

28-31. (Canceled)

32. (Previously presented) A system for managing contract data, comprising software at a decentralized execution system (DES), said software adapted to be executed by a processor comprised by the DES, said software adapted:

to have the DES receive a contract datagroup D_G from a procurement contract

management system (PCMS), said contract datagroup D_G selected from the group consisting of a contract dataset and a contract deltadataset, said contract datagroup D_G identifying N purchase items purchasable from a vendor V keyed to the contract datagroup D_G , said N being an integer of at least 2, said contract datagroup D_G identifying the vendor V if the contract datagroup D_G is the contract dataset, said DES comprising a relational database that includes contract datasets, vendor datasets having vendors, and purchase item datasets having purchase items;

to determine which, if any, of the N purchase items identified in the contract datagroup D_G match a purchase item in the purchase item datasets and to determine a total number K of such purchase items in D_G that do not so match a purchase item in the purchase item datasets, said K being an integer satisfying $0 \leq K < N$;

if the contract datagroup D_G is the contract dataset then to add a subset of D_G to the relational database, said subset of D_G excluding the K purchase items from D_G , wherein the vendor V matches a vendor in the vendor datasets;

if the contract datagroup D_G is the contract deltadataset then to add to the first dataset R purchase items of the contract datagroup D_G , wherein said contract deltadataset is keyed to a first dataset in the relational database, and wherein the R purchase items of D_G consist of all purchase items of D_G exclusive of the K purchase items of D_G .

33. (Previously presented) The system for managing contract data of claim 32, wherein the DES further comprises a special database that includes contract datasets, wherein the contract datagroup D_G is the contract deltadataset, wherein $K > 0$ and wherein:

if D_G is keyed to a first contract dataset in the special database, then said software is

further adapted to add to the first contract dataset in the special database the K purchase items of D_G ; and

if D_G is not keyed to any contract dataset in the special database, then said software is further adapted to form from D_G a contract dataset D_{C1} that includes the K purchase items and excludes the R purchase items, and to add D_{C1} to the special database.

34. (Previously presented) The system for managing contract data of claim 32, wherein the contract datagroup D_G is the contract dataset and the vendor V does not match a vendor in the vendor datasets, then said software is further adapted to have a vendor dataset D_V added to the relational database when a contract based on the subset of D_G is required at the DES, said vendor dataset D_V keyed to the vendor V.

35. (Original) The system for managing contract data of claim 34, wherein said software is further adapted to have the vendor dataset D_V extracted from a vendor database prior to having D_V added to the relational database.

36. (Previously presented) The system for managing contract data of claim 34, wherein to have the vendor dataset D_V added to the relational database comprises:

to communicate a message to a DES buyer keyed to at least one purchase item of the R purchase items, each of said at least one purchase item matching a purchase item in the purchase item datasets, said message relating to adding D_V to the relational database; and

to have the DES buyer cause D_V to be added to the relational database when the contract

based on the subset of D_G is required at the DES.

37. (Original) The system for managing contract data of claim 32, wherein the contract datagroup D_G is the contract dataset.

38. (Original) The system for managing contract data of claim 32, wherein the contract datagroup D_G is the contract deltadataset.

39. (Previously presented) The system for managing contract data of claim 32, said PCMS being a SAP system, said DES being a systems applications and products (SAP) system, said relational database being a SAP database, said software being non-SAP software.

40. (Currently amended) A system for managing contract data, comprising software at a decentralized execution system (DES), said software adapted to be executed by a processor comprised by the DES, said software adapted:

to have the DES receive a contract dataset D_C from a procurement contract management system (PCMS), said contract dataset D_C identifying a vendor V and M purchase items purchasable from the vendor V , said M being an integer of at least 1, said DES comprising a relational database that includes contract datasets, vendor datasets having vendors, and purchase item datasets having purchase items, said DES further comprising a special database that includes contract datasets;

to determine which, if any, of the N purchase items identified in the contract dataset D_C

match a purchase item in the purchase item datasets and to determine a total number K of such purchase items in the D_C that do not so match a purchase item in the purchase item datasets, said K being an integer satisfying $0 < K \leq N$;

if $K = N$ then to add D_C to the special database;

if $K < N$ then to determine whether the vendor V matches a vendor in the vendor datasets and to add a first subset of D_C to the relational database and if $K > 0$ to add a second subset of D_C to the contract datasets of the special database, said first subset of D_C excluding the K purchase items from D_C , said second subset of D_C excluding R purchase items from D_C , wherein the R purchase items of D_C consist of all purchase items of D_C exclusive of the K purchase items of D_C .

41. (Previously presented) The system for managing contract data of claim 40, wherein said software is further adapted:

to add a new purchase item to the purchase item datasets;

to determine whether the new purchase item is identified in a contract dataset D_{CS} of the special database; and

if the new purchase item is so identified in D_{CS} and D_{CS} identifies J purchase items such that J is an integer of at least 1, then to determine whether a vendor identified in D_{CS} matches a vendor in the vendor datasets, and if the vendor identified in D_{CS} so matches a vendor in the vendor datasets then:

if a contract identifier of D_{CS} matches a contract identifier of a first contract dataset in the relational database then to add the new purchase item to the first contract dataset, else

if the contract identifier of D_{CS} does not matches a contract identifier of any contract dataset in the relational database then to add a subset of D_{CS} to the relational database, said subset of D_{CS} including the new purchase item; and

if $J = 1$ then to delete D_{CS} from the special database else to delete the new purchase item from D_{CS} .

42. (Original) The system for managing contract data of claim 41, wherein said software is further adapted to extract the new purchase item from a purchase item database prior to adding the new purchase item to the purchase item datasets.

43. (Previously presented) The system for managing contract data of claim 40, said PCMS being a systems applications and products (SAP) system, said DES being a SAP system, said relational database being a SAP database, said special database being a non-SAP database, said software being non-SAP software.

44-48. (Canceled)

49. (Withdrawn) A system for contract archiving, comprising a procurement contract management system (PCMS) having software, said software adapted to be executed by a processor comprised by the PCMS, said software adapted:

to send a list of I identifiers to at least one decentralized execution system (DES), said I being an integer of at least 1, each identifier of the I identifiers identifying a contract dataset in

the PCMS earmarked by the PCMS for archiving;

to receive a return list of M of the I identifiers from each DES of the at least one DES in response to having sent the list of I identifiers to each said DES, said M being an integer in a range of $0 \leq M \leq I$, said return list being DES-specific, each said contract dataset identified in the return list of each DES having been approved by said each DES for archiving; and

to archive each contract dataset identified in the list of I identifiers and appearing in an intersection list of the return lists, if the intersection list is not empty.

50. (Withdrawn) The system for contract archiving of claim 49, said software further adapted to communicate to each DES of the at least one DES:

that the archiving was done by the PCMS for the contract datasets appearing in the intersect list, if the intersection list is not empty; or

that the archiving will not be done, if the intersection list is empty.

51. (Withdrawn) The system for contract archiving of claim 49, said PCMS and each of the at least one DES being a systems applications and products (SAP) system, said software being non-SAP software.

52. (Withdrawn) A system for contract archiving, comprising a first decentralized execution system (DES) of at least one DES, said first DES having software, said software adapted to be executed by a processor comprised by the first DES, said software adapted:

to receive from a procurement contract management system (PCMS) a list of I identifiers,

said I being an integer of at least 1, each identifier of the I identifiers adapted to identify a contract dataset in the PCMS earmarked by the PCMS for archiving, said list of I identifiers adapted to be sent by the PCMS to each DES of the at least one DES, said PCMS adapted to receive a return list of M of the I identifiers from each DES of the at least one DES in response to having sent the list of I identifiers to each said DES, said M being an integer in a range of $0 \leq M \leq I$, said return list being DES-specific, each said contract dataset identified in the return list of each DES having been approved by each said DES for archiving, said PCMS adapted to archive each contract dataset identified in the list of I identifiers and appearing in an intersection list of the return lists if the intersection list is not empty; and

to send to the PCMS the return list of the first DES.

53. (Withdrawn) The system for contract archiving of claim 52, said software further adapted to receive notification from the PCMS:

that the archiving was done by the PCMS for the contract datasets appearing in the intersect list, if the intersection list is not empty; or

that the archiving will not be done, if the intersection list is empty.

54. (Withdrawn) The system for contract archiving of claim 52, said PCMS and each of the at least one DES being a systems applications and products (SAP) system, said software being non-SAP software.

55. (Canceled)